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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Kevin L. Farley

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EXAMINER

HOM, SHICK C

ART UNIT

PAPER NUMBER

2666

DATE MAILED: 08/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/823,288	<b>Applicant(s)</b> FARLEY ET AL.	
	<b>Examiner</b> Shick C. Hom	<b>Art Unit</b> 2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments filed 2/7/05 have been fully considered but they are not persuasive. In page 17 line 1 to page 18 line 2 applicant argued that both Lee and Cohen are silent with regards to having any wireless paths is not persuasive because Lee et al. in col. 1 lines 43-58 reciting that the disclosed transparent access technology is for wireless system clearly anticipate the wireless paths.

***Claim Objections***

2. Claims 2-3, 5, 11-22 are objected to because of the following informalities: in claims 2, 5, 11-20, and 21-22, line 1, which recite "A system," "A gateway unit," "An apparatus," "A system," and "As system," seems to be reciting the system, the gateway unit, the apparatus, and the system of the corresponding base claims, respectively, and not some other system, gateway unit, or apparatus, if this is the case then delete "A system," "A gateway unit," "An apparatus," "A system," and "As system," and insert ---A system---, ---A gateway unit---, ---An apparatus---, ---A system---, respectively, for clarity. In claim 2 line 3 which recite "a then-intercepted" seems to refer

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back to the then-intercepted of claim 1 line 22, if that is the case then delete "a then-intercepted" and insert ---the then-intercepted---, for clarity. In claim 3 lines 4 and 5 which recite "defining" seems to be reciting ---using--- as in claim 1 and as suggested in the remarks, if that is the case then delete "defining" and insert ---using--- as in claim 1; further in claim 3 line 11 after the word "connection" insert ---governed by TCP protocols--- as recited in the original claim 1 and as in page 12 lines 4-11 of the remarks. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. Claims 1-3, 21-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 3 lines 24, 22-23, respectively, which recite "the connection" is not clear as to whether it is reciting ---said single connection governed by TCP protocols--- as in claim 1 line 11 or some other connections.

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***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 2, and 4-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (6,601,101) and Cohen (4,527,267) in view of Kumaki et al. (6,473,411).

Regarding claims 1, 2, and 4-20:

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Lee et al. disclose the system for interconnecting an end user machine with a server for the transmission of data (see col. 7 lines 35-58 which recite the server): first and second base stations connected to the server (see col. 3 lines 33-65 which recite the first and second devices for handoff clearly corresponds to the first and second base stations); a subscriber unit connected to the end user machine and normally using a first wireless path with the first base station, the subscriber unit using a second wireless transmission path with the second base station when handed off from the first station to the second base station (see Fig. 3, the client which corresponds to the subscriber unit and the first and second device which corresponds to the first and second base stations, the second path with the second device and the first path with the first device and col. 7 lines 11-15 which recite the handoff); means associated with the subscriber unit for initiating a first control signal signifying the start of a handoff and a second control signal signifying the completion of the handoff (see col. 9 lines 23-40 where the SET control signal corresponds to the first control signal and the END signal which indicates the completion of handoff corresponds to the second control signal); means for establishing a single connection governed by TCP protocols between the end user machine and the server (see

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abstract and col. 3 lines 33-65 which recite handoff of TCP session in a system including at least two or more devices, i.e. base stations), the receiving of data packets from the server by the end user machine causing the generation of first actual acknowledgment signals which contain a first portion indicative of a packet received by the end user machine and a second portion indicative of the size of a receiving window of the end user machine (see col. 3 line 66 to col. 4 line 8 and col. 9 lines 1-22 which recite the sequence number and window size being passed and col. 9 lines 23-58 and Fig. 4A which recite the TCP protocol) as in claims 1, 4, 6-10; a timer configured to time out prior to a normal timeout associated with the communication connection wherein the handoff optimizer is further configured to generate and forward the simulated acknowledgment signal after the timer has timed out (see col. 6 lines 12-38 and col. 10 lines 12-21 which recite the use of the timer) as in claims 17-18.

Lee et al. disclose all the subject matter of the claimed invention with the exception of the first intercepting means associated with the first base station for intercepting successive first actual acknowledgment signals; means coupled to the first intercepting means and responsive to the first control signal for generating a first simulated acknowledgment signal

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whose first portion matches that of the then-intercepted first actual acknowledgment signal and whose second portion contains a value that indicates data transfer on the connection is paused; and means for applying the first simulated acknowledgment signal to the server as in claims 1, 4, and 6-10; and means for storing the then-intercepted actual acknowledgment signal, and second means responsive to the completion of handoff for forwarding the stored actual acknowledgment signal to the first machine as in claims 2, 5-9, 19-20.

Cohen from the same or similar fields of endeavor teach that it is known to provide the first means associated with the first base station for intercepting successive first actual acknowledgment signals; means coupled to the first intercepting means and responsive to the first control signal for generating a first simulated acknowledgment signal whose first portion matches that of the then-intercepted first actual acknowledgment signal and whose second portion is zero; and means for applying the first simulated acknowledgment signal to the server (see col. 3 line 3 to col. 4 line 43 which recite receiving or intercepting the acknowledgment packet, writing the acknowledgment into the table or storage and formatting or generating the ACKing packet which corresponds to the simulated acknowledgment signal including the zero count which reads on



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the second portion being zero). Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide the first means associated with the first base station for intercepting successive first actual acknowledgment signals; means coupled to the first intercepting means and responsive to the first control signal for generating a first simulated acknowledgment signal whose first portion matches that of the then-intercepted first actual acknowledgment signal and whose second portion is zero; and means for applying the first simulated acknowledgment signal to the server as taught by Cohen in the communications system and method of Lee et al. The first means associated with the first base station for intercepting successive first actual acknowledgment signals; means coupled to the first intercepting means and responsive to the first control signal for generating a first simulated acknowledgment signal whose first portion matches that of the then-intercepted first actual acknowledgment signal and whose second portion is zero; and means for applying the first simulated acknowledgment signal to the server can be implemented by connecting the first means and means for generating the simulated acknowledgment signal of Cohen into the base stations of Lee et al. The motivation for providing the first means associated with the first base station for

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intercepting successive first actual acknowledgment signals; means coupled to the first intercepting means and responsive to the first control signal for generating a first simulated acknowledgment signal whose first portion matches that of the then-intercepted first actual acknowledgment signal and whose second portion is zero; and means for applying the first simulated acknowledgment signal to the server as taught by Cohen in the communication system and method of Lee et al. being that it provides more efficiency for the system since the system can better control and administer acknowledgments in the packet communication system.

For claims 1-2, 4-16, and 19-20, Lee et al. and Cohen disclose all the subject matter of the claimed invention with the exception of the signal containing a value that indicates data transfer on the connection is paused as in claims 1, 4, 6-10.

Kumaki et al. from the same or similar fields of endeavor teach that it is known to provide signal containing a value that indicates data transfer on the connection is paused (see col. 54 lines 10-50 which describe the pause state during IP packet transmission at a time of handoff). Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide signal containing a value

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that indicates data transfer on the connection is paused as taught by Kumaki et al. in the communications system of Lee et al. and Cohen. The signal containing a value that indicates data transfer on the connection is paused can be implemented by providing the handoff control of Kumaki et al. in the method and system of Lee et al. and Cohen. The motivation for providing the handoff control of Kumaki et al. in the communications system of Lee et al. and Cohen being that it provides desirable added feature of seamless handoff between base stations.

#### ***Allowable Subject Matter***

7. Claims 3, 21, and 22 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph.

#### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS

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of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C. Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Monday to Friday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SH



DANG TON  
PATENT EXAMINER